

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A distributed file storage system comprising:
a plurality of storage units configured to communicate with each other;

said plurality of storage units including:
a first storage unit including a storage disk media and a processor;
a second storage unit including a storage disk media and a processor;
a third storage unit including a storage disk media and a processor; and
a fourth storage unit including a storage disk media and a processor;

a file stored on the distributed file storage system;
a first file portion of the file comprising a first set of file data stored in the first storage unit;
a second file portion of the file comprising a second set of file data stored in the second storage unit, wherein the second set of file data is different from the first set of file data;
a first metadata to identify in part the location of the file, the first metadata stored on the first storage unit, the second storage unit, the third storage unit, and the fourth storage unit;
a second metadata, different at least in part from the first metadata, to supplement the first metadata in identifying the location of the file, the second metadata stored on at least one, but not all, of the first storage unit, the second storage unit, the third storage unit, and the fourth storage unit;

a switch in communication with the [[set]] plurality of storage units, the switch configured to receive a read request for the file stored on the distributed file storage system and to send the read request to one of the plurality of storage units wherein each of the plurality of storage units is operable to monitor in real time a pattern of access to the file, a latency to access each copy of the file, and content included in the file; and

each of the plurality of storage units is configured to use the first metadata to process a read request on behalf of the distributed file storage system, wherein the distributed file storage system is arranged for dynamically determining at least one copy of the file to be replicated and dynamically determining a quantity of the plurality of storage units to store each replicated copy of the file based

at least in part on the real time monitoring of the pattern of access to the file, the latency to access each copy of the file, and content included in the file.

2. (Previously Presented) The distributed file storage system of Claim 1, further comprising error correction data related to the file data, the error correction data stored in the distributed file storage system.
3. (Previously Presented). The distributed file storage system of Claim 2, further comprising error correction data which includes parity information.
4. (Previously Presented) The distributed file storage system of Claim 3, further comprising parity information which includes parity data blocks and location information indicating where the parity data blocks are stored.
5. (Previously Presented) The distributed file storage system of Claim 2, further comprising error correction data which includes redundancy data, wherein the second metadata indicates the location of the redundancy data.
6. (Previously Presented) The distributed file storage system of Claim 1, further comprising first metadata which includes metadata related to the root directory.
7. (Previously Presented) The distributed file storage system of Claim 1, the plurality of storage units comprising storage units configured to receive a request and to initiate the request to move the first file portion in real-time from the first storage unit to the third storage unit, and to send a request to update the second metadata to indicate the location of the moved first file portion.
8. (Previously Presented) The distributed file storage system of Claim 1, the plurality of storage units comprising storage units configured to receive a request and to initiate the request to replicate the first file portion in real-time and to store the replicated first file portion on a different storage unit, and to send a request to update the second metadata to indicate the location of the replicated first file portion.

9. (Previously Presented) The distributed file storage system of Claim 1, further comprising second metadata which includes metadata related to the locations in which the file data is stored.

10. (Previously Presented) The distributed file storage system of Claim 1, further comprising second metadata which includes metadata related to a parent directory of the file.

11. (Previously Presented) The distributed file storage system of Claim 1, further configured to handle more READ requests than WRITE requests.

12. (Previously Presented) The distributed file storage system of Claim 1, further configured to handle block transactions.

13-42. (Canceled)

43. (Previously Presented) The distributed file storage system of Claim 1, wherein the file has been stored on a number of the plurality of storage units, wherein the number is determined specifically for the file, and wherein the number is equal to or greater than two.

44-70. (Canceled)

71. (Previously Presented) The distributed file storage system of Claim 1, wherein the first metadata identifies the location of the second metadata.

72. (Previously Presented) The distributed file storage system of Claim 1, wherein the second metadata identifies the location of a third metadata, different at least in part from the first metadata and the second metadata, to supplement the first metadata and the second metadata in identifying the location of the file.

73. (Previously Presented) The distributed file storage system of Claim 1, wherein the second metadata identifies the location of at least one of the following: the first set of file data and the second set of file data.

74-97. (Cancelled)

98. (Previously Presented) The distributed file storage system of Claim 1, wherein the second set of file data comprises a next set of file data, wherein the next set of file data is sequential to the first set of file data.